REMARKS

Applicant respectfully requests that the foregoing amendments be made prior to examination of the present application. By this Preliminary Amendment, Applicants have amended claims 2-5 and 7-8, added new claims 17-18, and canceled claims 1 and 16 without prejudice or disclaimer. Support for the new claims can be found in the specification, for example, at page 6, line 29 and finishing at page 7, line 12. Accordingly, claims 2-11 and 17-18 are submitted for reconsideration.

In the final rejection mailed on February 7, 2001, claims 1-11 and 16 were rejected as being unpatentable over Applicant Admitted State of the Art (hereinafter "the AASA") in combination with Vijayakumar et al (U.S. Patent 4,751,149) or Wernberg et al (U.S. Patent 5,258,204). Claim 17 recites that a method of manufacturing a substantially continuous circumferential coating on a non-planar substrate comprises heating the non-planar substrate in a static substrate deposition geometry in a manner such that an external circumferential surface on the non-planar substrate remains exposed to an extent sufficient to form the continuous coating thereon, and to a temperature sufficient for decomposition of a gaseous precursor material, independently heating a source material to provide the gaseous precursor material, and directing the gaseous precursor material to the static non-planar substrate, whereby the substantially continuous circumferential coating is formed from decomposition of the gaseous precursor material on the exposed circumferential surface of the non-planar substrate.

In contrast to claim 17, none of the cited art, taken singly or in combination, disclose or suggest forming a continuous circumferential coating about a non-planar substrate having a static substrate deposition geometry (i.e., not necessary to move, such as by rotation). In the prior art, in order to obtain a circumferential coating on a non-planar substrate such as an optical fiber, it has always been necessary to rotate the fiber to ensure that the coating is provided completely about the circumferential surface. Further, it has always been assumed that failing to rotate the fiber would result in "gaps" in the coating due to a "shadow effect," i.e., portions of the surface of the fiber are shadowed from the deposition precursor and none or very little will be deposited. As a result, all prior art techniques have required some kind

of continuous movement such as rotation in order to enable circumferential deposition of a coating.

The AASA is typical of the prior art in requiring rotation of the substrate. In particular, the AASA discloses that rotation of the optical fiber was required due to the directional nature of the high energy deposition process, which has an undesirable effect on device performance (page 1, line 35 - page 2, line 3).

Vijayakumar et al. and Wernberg et al. fail to cure the deficiencies of the AASA. Both references disclose methods for depositing material on planar substrates. Neither reference discloses or suggests depositing circumferential coatings about a non-planar substrate or a substrate with a static deposition geometry. Accordingly, one of ordinary skill looking for developments in deposition of circumferential coatings on non-planar substrates would not be motivated to look to the teachings of Wernberg et al. and Vijayakumar et al., as neither reference provides any information regarding the deposition of circumferential coatings. Rather, the references merely disclose standard CVD processes for deposition on planar substrates.

Moreover, as the Federal Circuit held in *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984), to modify a reference there must be a suggestion for the modification. As discussed above, there is no suggestion in the AASA to modify prior art operation to use a static substrate geometry. There is also no suggestion in Wernberg et al. or Vijayakumar et al. to use these techniques to deposit a circumferential coating on non-planar substrates. Accordingly, there is no reason why a skilled person would combine the teachings of Wernberg et al. or Vijayakumar et al. with the AASA. Without such a suggestion, the Examiner has failed to provide a prima facie case of obviousness.

Even if combinable, claim 17 is still patentably distinguishable from the combination of Wernberg et al. or Vijayakumar et al. with the AASA. Claim 17 recites directing a gaseous precursor material to a static non-planar substrate, whereby a substantially continuous circumferential coating is formed from decomposition of the gaseous precursor material on the exposed circumferential surface of the non-planar substrate. In contrast, as

discussed above, the AASA requires movement of the non-planar substrate, and thus does not use a static non-planar substrate. In addition, there is nothing in Wernberg et al. or Vijayakumar et al. that discloses or suggests that deposition of a circumferential coating on a non-planar substrate nor depositing a coating on a static non-planar substrate. Accordingly, claim 17 is patentably distinguishable from the combination of the AASA and Wernberg et al. or Vijayakumar et al.

Claims 2-11 and 18 are also patentably distinguishable from the combination by virtue of their dependence from claim 17, as well as their additional recitations. For example, with respect to claim 18, there is no disclosure or suggestion in the cited prior art of holding a fiber in close proximity to a heating surface such that the fiber is separated from the heating surface by a gap large enough to allow the vapor to envelop the surface of the fiber but small enough to allow the surface of the fiber to be heated. Accordingly, claim 18 further distinguishes the claimed invention from the cited prior art.

Applicant believes that the present application is now in condition for allowance. Favorable consideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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2. (Amended) A method as claimed in claim [1] 17, wherein the coating has piezo-electric modulation characteristics.

3. (Amended) A method as claimed in claim [1] 17, wherein the coating has electro-optic modulation characteristics.

4. (Amended) A method as claimed in claim [1] 17, wherein the coating has semi-conducting properties.

5. (Amended) A method as claimed in claim [1] 17, wherein the coating comprises substantially zinc-oxide.

7. (Amended) A method as claimed in claim [1] 17, wherein the source material is provided by single source chemical vapour deposition.

8. (Amended) A method as claimed in claim [1] 17, wherein the non-planar substrate is an optical fiber.